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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,611	10/14/2003	Frank E. Semersky	1-36691	2924
4859	7590	03/31/2005	EXAMINER	
MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619			VO. HAI	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,611

Applicant(s)

SEMERSKY, FRANK E.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1024.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what "the first and second layers of plastic are the same or different" is meant. What does Applicant refer to? the density, composition, or thickness?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 5, 8-13, 16-19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 5,149,579). Park teaches a container comprising a polypropylene skin layer, polypropylene foam layer, a functional layer and a polypropylene foam layer (column 8, lines 30-60). Park uses carbon dioxide as a blowing agent to form the foam (column 10, lines 45-46), therefore, it is not seen that

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the foam cells could not have contained carbon dioxide. The skin and the foam layer are made from the same polypropylene. The foam layer and the functional layer are made from different materials. It is the examiner's position that Park anticipates the claimed subject matter.

5. Claims 1-11, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayes et al (US 6,485,819). Hayes teaches a laminate film for use in containers comprising a polyethylene terephthalate (PET) film layer and a copolyester film layer (column 9, lines 61 et seq.). The layer of copolyester is foamed by using carbon dioxide as a blowing agent (column 15, lines 35-40). Therefore, it is the examiner's position that the foam cells would have contained carbon dioxide. Since the foam and the film contain polyethylene terephthalate, they are made from "the same polyethylene terephthalate". The isosorbide polyester renders the foam layer chemically different from the PET film layer. It is the examiner's position that Hayes anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 6, 7, 14, 15, 20, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5,149,579) as applied to claim 1 above, further in view of Hayes et al (US 6,485,819). Park teaches a container comprising

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polypropylene foam layer, a functional layer and a polypropylene foam layer (column 8, lines 30-60). Park does not teach the foam layer made from a polyethylene terephthalate. Hayes, however, teaches a multilayer laminate for use in food packaging comprising a foam layer made from a copolyester that exhibit an improved rate of biodegradation more amenable to solid waste disposal (column 1, lines 5-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a copolyester foam for the polypropylene foam layer motivated by the desire to provide the container with higher biodegradation rate and higher thermal properties.

With regard to claims 3, 4, 23 and 25, Park teaches a container comprising a non-foamed polypropylene skin layer, polypropylene foam layer, a functional layer (column 8, lines 30-60). Park does not specifically disclose the functional layer made from PET. Hayes, however, teaches a food container comprising a layer of copolyester suitable as a gas barrier (column 8, lines 7-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use copolyester as the functional layer of Park because copolyester is shown to be a good oxygen barrier and further the use of copolyester provides the container with higher biodegradation rate and higher thermal properties.

8. Claims 12-17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al (US 6,485,819) as applied to claim 1 above, further in view of Park et al (US 5,149,579). Hayes teaches a food container comprising a copolyester foam layer. Hayes does not teach a food container comprising two foam layers and a

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functional layer sandwich between the foam layers. Park teaches a food container comprising two foam layers and a functional layer sandwich between the foam layers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form a food container comprising a functional layer sandwiched between two copolyester foam layers since such structure is known in the food packaging and Park provides necessary details to practice the invention of Hayes.

9. Claims 18-21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al (US 6,485,819) as applied to claim 1 above, further in view of Haase et al (US 5,149,579). Hayes teaches a laminate film for use in containers comprising a film layer and a layer of copolyester (column 9, lines 61 et seq.). The layer of copolyester is foamed by using carbon dioxide as a blowing agent (column 15, lines 35-40). The laminate may have five layers joined together by heat (column 10, lines 5-10). The film layer can be made from PET, polyethylene, polyethylene sulfide, or polyimide (column 10, lines 1-10). Accordingly, the laminate film comprises one foam layer made from copolyester and other four film layers formed from PET, polyethylene, polyethylene sulfide, or polyimide. Hayes does not specifically disclose the order of the film layer, the foam layer in the laminate to meet the structural limitations as recited in the claims. Haase, however, teaches a dinner plate comprising a polystyrene foam layer sandwiched between the polystyrene film layers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form a food container having a copolyester

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foam layer sandwiched between the PET film layers because such a structure is known in the food packaging art and Haase provides necessary detail to practice the invention of Hayes.

10. Claims 1- 11, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kocher et al (US 5,919,547) further in view of Hayes et al (US 6,485,819).

Kocher teaches a food container comprising a support member 12, a sealant layer (column 10, lines 30-60). The support member and a sealant layer are made of a polyethylene terephthalate resin. Hence, they are the same. The support member is polyolefin foam whereas the sealant layer is made from polyethylene terephthalate.

Therefore, they are different. Kocher does not teach the use of carbon dioxide to form the foamed support member. Hayes, however, teaches the food container comprising a foam layer of copolyester using carbon dioxide as a blowing agent.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use carbon dioxide as a blowing agent to generate the foam cells in the support member because such is known in the foam art and Hayes provides necessary details to practice the invention of Kocher.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

Hai Vo
Tech Center 17th